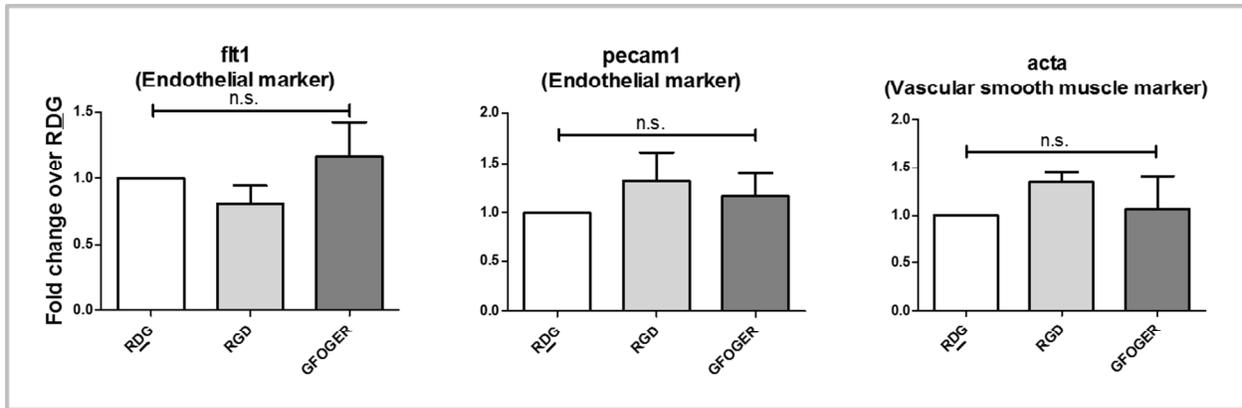


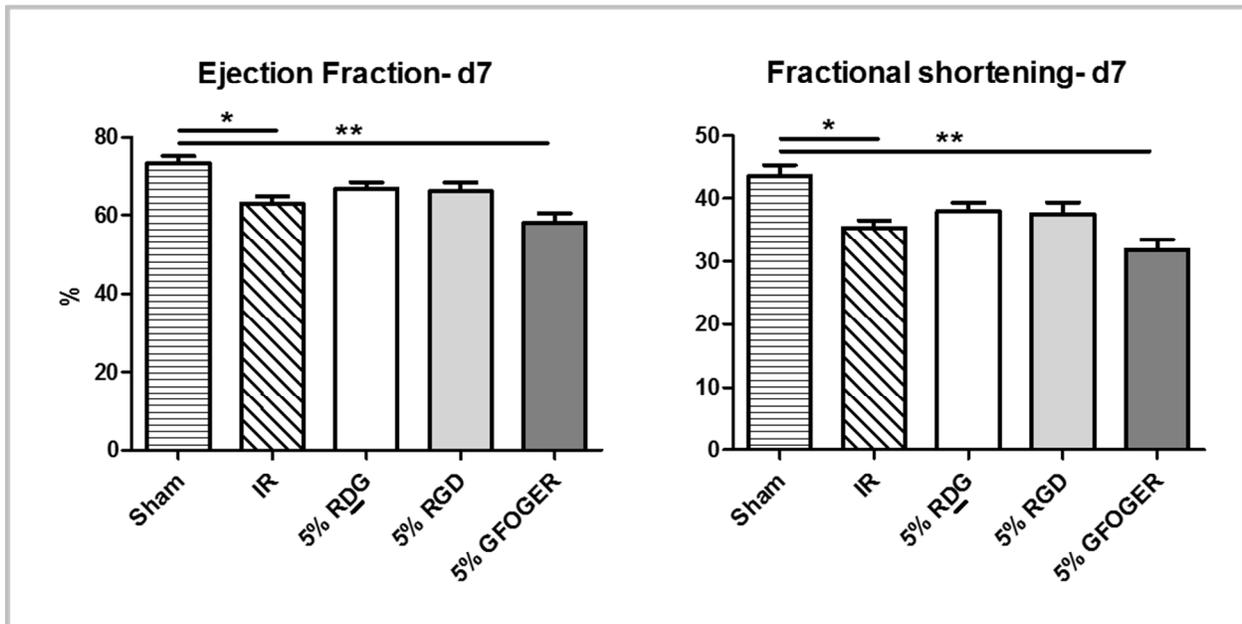
**Evaluation of hydrogels presenting extracellular matrix-derived  
adhesion peptides and encapsulating cardiac progenitor cells for  
cardiac repair**

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Supplemental information: Three pages, inclusive of 2 figures and 2 tables.



**Figure S 1** Expression of lineage markers in encapsulated CPCs. mRNA expression of endothelial lineage markers, flt1 and pecam1, and vascular smooth muscle marker, acta, 2 days after encapsulation.



**Figure S 2 Echocardiography 7 days after surgery.** Ejection fraction and fractional shortening obtained using M-mode echocardiograms of rat hearts 28 days following treatment.  $n \geq 5$  for other groups, ANOVA and Dunnet's post-hoc test comparisons with Sham and IR groups, \*:  $p < 0.05$ .

| Target gene | Forward primer (5'→3')      | Reverse primer (5'→3') |
|-------------|-----------------------------|------------------------|
| gapdh       | GTGGACCTGACCTGCCGTCT        | GGAGGAGTGGGTGTCGCTGT   |
| nkx2_5      | ACCCTGAGTCCCCTGGATTT        | TCACTCATTGCACGCTGCAT   |
| myh7        | GGCAAGACAGTGACCGTGAAG       | CGTAGCGATCCTTGAGGTTGTA |
| tnnt2       | GCGGGTCTTGAGACTTTCT         | TTCGACCTGCAGGAGAAGTT   |
| myh6        | TCTCCGACAACGCCTATCAGTAC     | GTCACCTATGGCTGCAATGCT  |
| tnni3       | CCAACTACCGCGCTTATGC         | CTCGCTCCAGCTCTTGCTTT   |
| mef2c       | TAACTTCTTTTCACTGTTGTGCTCCTT | GCCGCTTTTGGCAAATGTT    |
| mlc2v       | CCTTGGGCGAGTGAACGT          | GGGTCCGCTCCCTTAAGTTT   |
| itga1       | AGGATTTCTGGCTTGTGGG         | ACTATGTCCAGTTGAGTGCTG  |
| itga2       | GACCTATCCACTGCCACATG        | TGTGAGAAAACCTCCAGTTCC  |
| itga3       | GGAACAGCACCTTCATCGAG        | AATGTCCACAGAGAACCACG   |
| itga5       | GGAACCTCACTTACGGCTATG       | ACCAGCAAGTCATCCAGC     |
| itga8       | ACAGGCTCACATTCTGGTG         | TCCTTCCCCTTCATTTCTTGC  |
| itga10      | CTTCAGTTCTGGGATATGTGCC      | CCAGTCTTCGTAGGAAGGTCT  |
| itga11      | GTGCCTATGACTGGAATGGAG       | CGACCGATGTGACTGTGTAC   |
| itgav       | GCAGTGTGAGGAATTGATAGCG      | AAGTAGAATGTGAGCCTGTGCG |
| itgb1       | TGTAAGGAGAAGGATGTTGACG      | CAACCACACCAGCTACAATTG  |
| itgb3       | CCCTGCTCATCTGGAAACTC        | CGGTACGTGATATTGGTGAAGG |
| itgb5       | GCTCGCAGGTCTCAACATATG       | TCTCTATCTCACCTCCACAGC  |

Table S 1 List of primers.

| Target animal                                   | Target protein        | Antibody/ stain | Application   | Dilution (v/v)  |
|---|-----------------------|-----------------|---------------|---|
| Rat/human                                       | c-kit                 | H-300           | CPC isolation | 10 uL antibody added to 50 uL beads Dynabeads M-280 Sheep anti-rabbit IgG |
| Human   | MHC                   | ab50967         | WB            | 1:500   |
| Human   | Troponin I            | H170            | WB            | 1:1000  |
| Rat   | CD11b                 | CBL1512         | IHC           | 1:50  |
| Human   | MTCO2                 | ab92824         | IHC           | 1:50  |
| Rat   | Isolectin             | FL-1201         | IHC           | 1:50  |
| Rat   | Wheat germ agglutinin | RL-1022         | IHC           | 1:250   |
| WB: Western blotting, IHC: Immunohistochemistry |                       |                 |               |   |

Table S 2 List of antibodies.